

**Amendments to the Claims:**

1. (Previously presented) A method of forming a three-dimensional object by selective deposition modeling from a solidifiable build material, the three-dimensional object having an outer surface defined by a shell structure of a desired dimensional configuration surrounding an internal volume of the object, the method comprising the steps of:

selectively dispensing the build material from at least one orifice in a flowable state to form layers of the object comprising the shell structure and an internal lattice structure formed in the areas of the layers that reside within the internal volume of the object, the internal lattice structure formed by dispensing the build material along a plurality of continuous segments that attach across the shell structure of the layer being formed for maintaining the desired dimensional configuration of the shell structure as it is formed; and

solidifying the dispensed material to a non-flowable state, the internal lattice structure substantially preventing the shell structure from non-uniformly deforming as the build material solidifies and shrinks.

2. (Previously presented) The method of claim 1 wherein the internal lattice structure interconnects the shell structure in a X-direction, in a Y-direction, and in a Z-direction to maintain the desired dimensional configuration in all three-dimensions as the build material solidifies and shrinks.

3. (Previously presented) The method of claim 1 wherein the plurality of continuous segments of the internal lattice structure forms a plurality of vertically extending supports.

4. (Previously presented) The method of claim 3 wherein at least one of the vertically extending supports is a flat planar element.

5. (Previously presented) The method of claim 3 wherein at least one of the vertically extending supports is a curved planar element.

6. (Previously presented) The method of claim 3 wherein the vertically extending supports extend between upward facing surfaces and downward facing surfaces of the shell structure of the three-dimensional object and thereby establish a plurality of elongated

compartments within the three-dimensional object.

7. (Previously presented) The method of claim 6 further comprising the step of:  
dispensing the build material to form post supports residing within said elongated compartments to provide support for upward facing surfaces of the shell structure of the three-dimensional object formed over said elongated compartments.

8. (Previously presented) The method of claim 6 wherein the horizontal cross-sectional shape of said elongated compartments is polygonal.

9. (Previously presented) The method of claim 1 further comprising the steps of:  
providing computer data representing the three-dimensional object, the computer data comprising data representing the shell structure; and  
processing the computer data to establish layer data for forming the layers of the object comprising the shell structure and internal lattice structure.

10. (Previously presented) The method of claim 10 further comprising the step of:  
providing the ability to enlarge the computer data with respect to the desired dimensional configuration of the three-dimensional object to account for linear shrinkage of the three-dimensional object as it is formed, the ability to enlarge the computer data provided the step of processing the computer data to establish layer data.

11. (Previously presented) The method of claim 1 wherein the build material is a phase change material solidified by lowering the temperature of the build material after it has been dispensed.

12. (Previously presented) The method of claim 1 wherein the build material is a powder and is solidified by selectively dispensing a binder that reacts with the powder to cure the powder to form the shell structure and the internal lattice structure.

13. (Currently Amended) A method of forming a three-dimensional object by selective deposition modeling from a build material curable upon exposure to actinic radiation, the three-dimensional object having an outer surface defined by a shell structure of a desired dimensional configuration, the method comprising the steps of:

selectively dispensing the curable build material from at least one orifice in a flowable state to form layers of the object comprising the shell structure and an internal lattice structure in the areas of the layers that reside within the internal volume of the object, the internal lattice structure formed by dispensing the build material along a plurality of continuous segments that attach across the shell structure of the layer being formed for maintaining the desired dimensional configuration of the shell structure as it is formed;

solidifying the dispensed material to a non-flowable state, the internal lattice structure substantially preventing the shell structure from non-uniformly deforming as the build material solidifies and shrinks; and

curing the dispensed layers of build material after the dispensed build material has solidified.

14. (Previously presented) The method of claim 13 wherein the internal lattice structure interconnects the shell structure in a X-direction, in a Y-direction, and in a Z-direction to maintain the desired dimensional configuration in all three dimensions as the build material solidifies and shrinks.

15. (Previously presented) The method of claim 13 further comprising the steps of: providing computer data representing the three-dimensional object, the computer data comprising data representing the shell structure; and

processing the computer data to establish layer data for forming the layers of the object comprising the shell structure and internal lattice structure.

16. (Previously presented) The method of claim 15 further comprising the step of: providing the ability to enlarge the computer data with respect to the desired dimensional configuration of the three-dimensional object to account for linear shrinkage of the three-dimensional object as it is formed, the ability to enlarge the computer data provided before the step of processing the computer data to establish layer data.

17. (Previously presented) The method of claim 13 further comprising the steps of: dispensing a support material in a flowable state to support the shell structure of the

three-dimensional object;

solidifying the dispensed support material to a non-flowable state; and

removing at least some of the support material from the three-dimensional object after the three-dimensional object has been formed.

18. (Previously presented) The method of claim 17 wherein the plurality of continuous segments of the internal lattice structure form a plurality of vertically extending supports.

19. (Previously presented) The method of claim 18 wherein at least one of the vertically extending supports is a flat planar element.

20. (Previously presented) The method of claim 18 wherein at least one of the vertically extending supports is a curved planar element.

21. (Previously presented) The method of claim 18 wherein the vertically extending supports extend between upward facing surfaces and downward facing surfaces of the shell structure of the three-dimensional object and thereby establish a plurality of elongated compartments within the three-dimensional object.

22. (Previously presented) The method of claim 21 wherein the support material is dispensed into each elongated compartment to provide support for upward facing surfaces of the shell structure of the three-dimensional object formed over said elongated compartments.

23. (Previously presented) The method of claim 21 wherein the horizontal cross-sectional shape of said elongated compartments is polygonal.

24. (Previously presented) The method of claim 21 wherein the elongated compartments are interconnected and the method further comprising the steps of:

providing a drainage opening in the shell structure; and

removing the support material from the elongated compartments after the three-dimensional object has been formed.

25. (Withdrawn without prejudice)

26. (Withdrawn without prejudice)

27. (Withdrawn without prejudice)

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42. (Withdrawn without prejudice)

43. (Withdrawn without prejudice)

44. (New) The method of claim 1 further comprising dispensing the build material from an print head or a nozzle.

45. (New) The method of claim 13 further comprising dispensing the build material from an print head or a nozzle.

46. (New) A method of forming a three-dimensional object by selective deposition modeling from a solidifiable build material, the three-dimensional object having an outer surface defined by a shell structure of a desired dimensional configuration, the method comprising the steps of:

selectively dispensing the build material in a flowable state to form layers of the object comprising the shell structure and an internal lattice structure in the areas of the layers that reside

within the internal volume of the object, the internal lattice structure formed by dispensing the build material along a plurality of continuous segments that attach across the shell structure of the layer being formed for maintaining the desired dimensional configuration of the shell structure as it is formed and forming a plurality of vertically extending supports at least one which is a curved planar element; and

solidifying the dispensed material to a non-flowable state, the internal lattice structure substantially preventing the shell structure from non-uniformly deforming as the build material solidifies and shrinks.

47. (New) The method of claim 46 wherein the build material is curable upon exposure to actinic radiation